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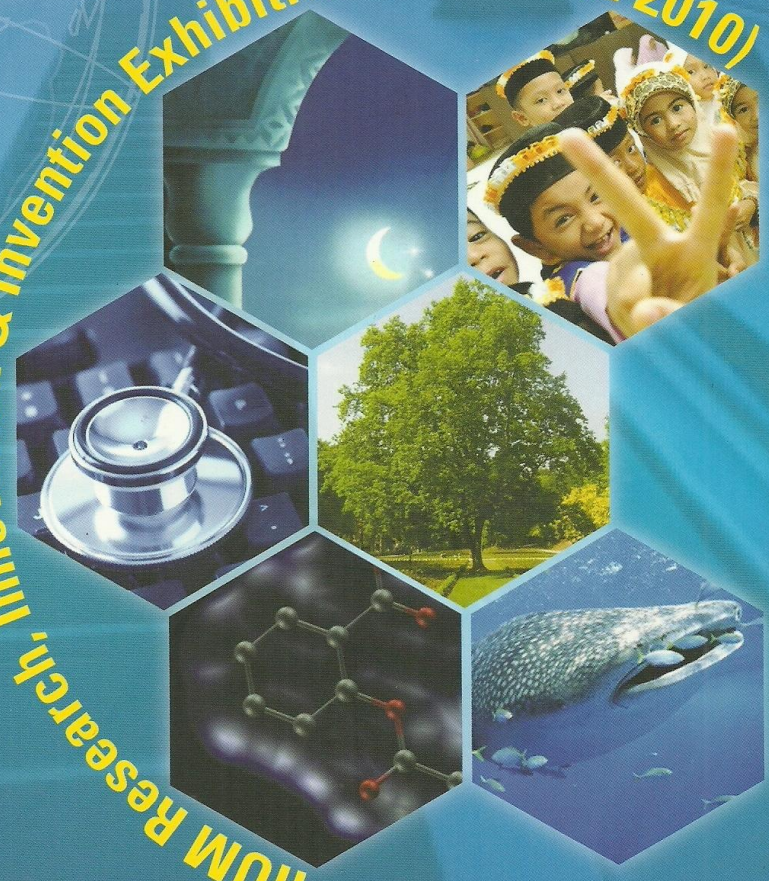

ENHANCING QUALITY RESEARCH &

INNOVATION for SOCIETAL DEVELOPMENT

P-289 Recycling of Construction and Demolition Waste

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There are several methods in managing C&D waste including reduce, reuse, recycle and dispose at landfill. Among these methods, recycling is seen as a better option after reduce and reuse due the advantages that this method offers in terms of economy and environment. The aim of this research is to provide general overview on the practices of recycling of C&D waste on construction site. Apart from that, the study also highlighted important issue pertaining to C&D waste including the limitation to the practices and strategies for recycling of C&D waste. The research is conducted through questionnaire survey with respondents ranges from Grade 5, Grade 6 and Grade 7 construction company around Klang Valley. Consequently, this study is believed to develop and increase the awareness of construction industry key players in recycling of C&D waste.

P-290 Investigate the influential factors that impart efficient responses to the structural reliability and sustainability

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Many factorial elements have been overstressed on the professional activities that related to homogeneous construction concept. In this context, professional activities refer to structural reliability. Reliability has to do with the quality of measurement. We hear the term used a lot in research contexts, but what does it really mean? In research, the term "reliable" means dependable in a general sense, but that's not a precise enough definition. What does it mean to have a dependable measure or observation in a structural context? In addition to design activities a professional must be aware of and conversant in site, structural, mechanical and electrical design. Also must be aware of the legal constrictions such as codes, laws, and regulations and of the many industry standards that influence design and construction. Besides, professional rigorously need to know the measurement policy and the conversion according to the present practice of the community. But professional always face problems due to unavailability of suitable and comprehensive factorial references during design period. Now another question arises as-what are the essential factors that professional need to consider in their activities? Factors are influenced by the quality and adaptability of the reliability and sustainability. The influences of factors are very important in process design, planning and implementation methodology. The aim of this study is to find the essential influential factors that related with structural reliability and sustainability.

P-291 Computer Aided Design of Potential Inhibitors for Gaucher Disease

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Acid β-glucosidase (GlcCerase) is a lysosomal enzyme, which is important in biodegradation of blood cells in human body. Mutation of GlcCerase will lead to Gaucher disease; the most common lysosomal storage disease. The current available treatments for Gaucher disease are enzyme replacement therapy and substrate reduction therapy; and both are costly. With the help of computer molecular modeling, new drug candidate for Gaucher disease treatment can be designed. In this research, we have successfully designed a lead-candidate to act as a potential inhibitor, as a part of substrate reduction therapy by adapting novel in silico method. Lamarckian genetic algorithm is used to locate the potential inhibitor sites in the acid β-glucosidase and strength of the binding is evaluated using potential mean force (PMF) scores. Good correlation between experimental inhibition constant (K_i) and computational binding score is established with the correlation coefficient of 0.782. This correlation used as to predict the unknown K_i value of the new ligand. N-decyl deoxynojirimycin gave a promising result to be considered as a candidate inhibitor